



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/827,500	04/06/2001	Jane Wen Chang	11646-013001	5732

7590 06/16/2005  
Fisher & Richardson P.C.  
225 Franklin Street  
Boston, MA 02110

EXAMINER
----------

EHICHIOYA, FRED I

ART UNIT	PAPER NUMBER
----------	--------------

2162

DATE MAILED: 06/16/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/827,500

Applicant(s)

CHANG ET AL.

Examiner

Fred I. Ehichioya

Art Unit

2162

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 24 March 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1 - 15, and 17 - 30 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1 - 15, and 17 - 30 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## **DETAILED ACTION**

### ***Response to Arguments***

1. Applicant's arguments, with respect to claims 1 – 15, and 17 – 30, filed 24 March 2005 have been fully considered but they are not persuasive for the following reasons.

2. Applicants argue: "Claims 1, 14, 29 and 30 recite "outputting a prose rendition of the query text," or similar language. At least this quoted claim feature is totally absent from the cited references." (Page 7, Para 4 of the Remarks).

In response to Applicants' argument: Examiner respectfully disagrees with the applicants. Examiner wishes to state that Applicants discloses on Page 2, lines 20 – 23 of the specification that "Outputting the prose rendition" include "processing the query in conjunction with rules of grammar and processing the query in conjunction with prose configuration file."

Appelt discloses in column 3, lines 8 – 17 that "The natural language querying can be based on a query grammar. The query grammar can be associated with a topic. The query grammar can be represented as pattern action-rules." This clearly reads into and suggests, "outputting prose rendition" as defined by the applicants in the specification.

3. In view of the above, the examiner contends that all limitations as recited in the claims have been addressed in this Office Action. For the above reasons, Examiner believed that rejection of the last Office action was proper.

***Claim Rejections - 35 USC § 103***

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

5. Claims 1, 7 – 12, 14, and 25 - 30 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent 6,338,575 issued to Khan et al. (hereinafter "Khan") in view of U.S. Patent 6,601,026 issued to Douglas E. Appelt et al (hereafter "Appelt").

Art Unit: 2162

Regarding claims 1, 14, 29 and 30, Khan teaches a method of accessing information comprising:

processing query text and a wireless identifier received from a wireless devices (see column 2, lines 4 – 34 and column 16, lines 25 – 29);

searching a collection of data for a set of results matching the query text (see column 10, lines 44 – 50); and

outputting the subset of results on the wireless device (see column 10, lines 13 – 26 and column 11, lines 1 – 3).

Khan does not explicitly teach selectively reducing the set of results to generate a subset of results; and outputting a prose rendition of the query text.

Appelt teaches selectively reducing the set of results to generate a subset of results (see column 3, lines 20 - 25);

outputting a prose rendition of the query text (see column 3, lines 8 – 17 and column 12, lines 23 - 35).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine teaching of Appelt with the teaching of Khan wherein the query can be represented as pattern-action rules. The motivation is that the invention is easy to use since it does not require users to learn cryptic search syntax associated with the search criteria.

Art Unit: 2162

Regarding claims 7 and 25, Khan teaches selectively reducing comprises:

placing the set of results in a hierarchical data structure organized by taxonomy  
(see column 24, lines 18 – 46);

discarding results positioned at a lowest level of the hierarchical data structure  
(see column 23, lines 64 – 67).

Regarding claim 8, Appelt teaches outputting the prose rendition comprises:

processing the query text in conjunction with rules of grammar (see column 3,  
lines 14 - 17); and

processing the query text in conjunction with a prose configuration file (see  
column 2, lines 21 – 29).

Regarding claim 9, Khan teaches outputting of the subset comprises placing the  
subset in a table (see column 23, lines 4 – 9).

Regarding claim 10, Khan teaches customizing the table to the wireless device  
(see column 10, lines 64 - 65).

Regarding claim 11, Khan teaches customizing the table to the wireless device  
comprises:

loading a wireless style sheet database (see column 11, lines 1 - 3);

locating a style sheet that matches the wireless identifier in the style sheet database (see column 11, lines 3 – 6); and

reducing the length and width of the table in accordance with the style sheet (see column 10, lines 13 – 19).

Regarding claims 12 and 27, Khan teaches wherein reducing further comprises subdividing the table into a plurality of smaller tables (see column 25, lines 2 – 3).

Regarding claim 26, Khan teaches outputting the subset comprises:  
placing the subset in a table (“see column 23, lines 4 – 9); and  
reducing the length and width of the table in accordance with the style sheet (see column 10, lines 13 – 19).

Regarding claim 28, Khan teaches outputting the subset comprises replacing long form words in the table with corresponding abbreviations in an abbreviations database (see column 25, lines 23 – 30).

Art Unit: 2162

6. Claims 2 – 6, 13, 15, and 17 - 24 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent 6,338,575 issued to Khan in view of Appelt and further in view of U.S. Patent 6,505,158 issued to Allstair D. Conkie (hereafter "Conkie").

Regarding claims 2 and 20, Khan and Appelt disclose the claimed subject matter as discussed in claims 1 and 14 respectively. Khan teaches processing the query text comprises:

adding context to the search fragment (see column 10, lines 42 - 43).

Khan or Appelt does not explicitly teach parsing the query text to generate a search fragment; substituting long form words for abbreviations contained in the search fragment in conjunction with an abbreviations dictionary.

Conkie teaches parsing the query text to generate a search fragment (see column 3, line 22 and column 4, lines 65 – 67);

substituting long form words for abbreviations contained in the search fragment in conjunction with an abbreviations dictionary (see column 3, lines 34 – 41).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine teaching of Conkie with the teaching of Khan and Appelt wherein the words are parsed to generate the fragments. The motivation is that parsing articulates the way words or phrased are used.



Regarding claims 3 and 21, Khan teaches adding context comprises extracting data from a web page from which the query text was received (see column 23, lines 58 – 60; where “extracting data from a web page” is read on “the user is then allowed to select the headline or hyperlink of his/her choice”).

Regarding claims 4 and 22, Khan teaches adding context comprises extracting data from a previously presented results page from which the query text was received (see column 22, lines 53 – 59).

Regarding claims 5 and 23, Khan and Appelt disclose the claimed subject matter as discussed in claim 1 and 12 respectively.

Conkie teaches processing the query text comprises:  
normalizing text of the query (see column 3, lines 22 - 25);  
parsing the text (see column 3, line 22);  
associating long form words for abbreviations in conjunction with an abbreviations dictionary (see column 3, lines 25 - 41); and  
providing meaning to the text (see column 3 lines 29 - 34).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine teaching of Conkie with the teaching of Khan and Appelt wherein the words are parsed to generate the fragments. The motivation is that parsing articulates the way words or phrased are used.

Art Unit: 2162

Regarding claims 6 and 24, Conkie teaches associating context with the text (see column 4, lines 56 – 59).

Regarding claim 13, Khan and Appelt disclose the claimed subject matter as discussed in claim 10. Appelt teaches customizing the table comprises:

loading an abbreviations dictionary (see column 3, lines 39 - 51).

Khan or Appelt does not explicitly teach replacing long form words in the table with corresponding abbreviations in the abbreviations.

Conkie teaches replacing long form words in the table with corresponding abbreviations in the abbreviations (see column 3, lines 22 – 41).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine teaching of Conkie with the teaching of Khan and Appelt wherein the words are parsed to generate the fragments. The motivation is that parsing articulates the way words or phrased are used.

Regarding claim 15, Conkie teaches the query text is a combination of text, sentence fragments and abbreviated words (see column 3, lines 20 - 67).

Regarding claim 17, Conkie teaches the query text is sentence fragments (see column 4, line 4).

Art Unit: 2162

Regarding claim 18, Conkie teaches the query text is abbreviated words (see column 3, lines 22 - 25).

Regarding claim 19, Conkie teaches the query text is speech (see column 2, lines 4 -6).

### ***Conclusion***

7. NPL document "Grammar-like Functional Rules for Representing Query Optimization Alternatives" by Guy M. Lohman is pertinent to applicants' claimed invention but not relied upon.

8. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

Art Unit: 2162


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Fred I. Ehichioya whose telephone number is 571-272-4034. The examiner can normally be reached on M - F 8:00 AM to 4:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John E. Breene can be reached on 571-272-4107. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Fred I. Ehichioya  
Patent Examiner  
Art Unit 2162

June 7, 2005



SHAHID ALAM  
PRIMARY EXAMINER